

Title (en)
COMPOSITE ARTICLE COMPRISING A CERAMIC COATING

Title (de)
VERBUNDARTIKEL MIT KERAMIKBESCHICHTUNG

Title (fr)
ARTICLE COMPOSITE COMPRENANT UN REVETEMENT CERAMIQUE

Publication
EP 1606107 A4 20080423 (EN)

Application
EP 04715633 A 20040227

Priority

- US 2004005710 W 20040227
- US 39585503 A 20030325

Abstract (en)
[origin: WO2004094333A2] A ceramic coating is formed on a conductive article by immersing a first anodic electrode, including the conductive article, in an electrolyte comprising an aqueous solution of alkali metal hydroxide and an alkali metal silicate, providing a second cathodic electrode in contact with the electrolyte, and passing an alternating current from a resonant power source through the first electrode and to the second electrode while maintaining the angle phi between the current and the voltage at zero degree, while maintaining the voltage within a predetermined range. The resulting ceramic coated article comprises a coating which includes a metal, silicon, and oxygen, wherein the silicon concentration increases in the direction from the article surface toward an outer surface of the ceramic coating surface layer.

IPC 1-7
B32B 9/04; **B32B 9/00**; **C25D 9/04**

IPC 8 full level
B32B 9/00 (2006.01); **B32B 9/04** (2006.01); **C25D 3/02** (2006.01); **C25D 5/18** (2006.01); **C25D 9/04** (2006.01); **C25D 11/02** (2006.01); **C25D 11/08** (2006.01)

IPC 8 main group level
C04B (2006.01); **C25B** (2006.01)

CPC (source: EP KR US)
B32B 9/00 (2013.01 - KR); **B32B 9/04** (2013.01 - KR); **B32B 15/04** (2013.01 - KR); **C25D 9/04** (2013.01 - EP KR US); **C25D 11/026** (2013.01 - EP US); **C25D 11/08** (2013.01 - EP US)

Citation (search report)

- [A] WO 0250343 A1 20020627 - OBSCHESTVO S OGRANICHENNOI OTV [RU], et al
- [A] DATABASE WPI Week 199731, Derwent World Patents Index; AN 1997-340324, XP002472801
- [A] DATABASE WPI Week 200332, Derwent World Patents Index; AN 2003-334257, XP002472802
- See references of WO 2004094333A2

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DOCDB simple family (publication)
WO 2004094333 A2 20041104; **WO 2004094333 A3 20041223**; AU 2004232674 A1 20041104; AU 2004232674 B2 20081023; BR PI0408723 A 20060307; CA 2520079 A1 20041104; CN 100450769 C 20090114; CN 1771124 A 20060510; EP 1606107 A2 20051221; EP 1606107 A4 20080423; IL 170771 A0 20090211; IL 170989 A 20091118; JP 2006521473 A 20060921; JP 4510811 B2 20100728; KR 20060002860 A 20060109; MX PA05010059 A 20060308; NO 20054909 D0 20051024; NO 20054909 L 20051024; PL 378536 A1 20060502; RU 2005132631 A 20070427; RU 2345180 C2 20090127; UA 86764 C2 20090525; US 6919012 B1 20050719; ZA 200507648 B 20070228

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US 2004005710 W 20040227; AU 2004232674 A 20040227; BR PI0408723 A 20040227; CA 2520079 A 20040227; CN 200480007836 A 20040227; EP 04715633 A 20040227; IL 17077105 A 20050908; IL 17098905 A 20050920; JP 2006508843 A 20040227; KR 20057017912 A 20050923; MX PA05010059 A 20040227; NO 20054909 A 20051024; PL 37853604 A 20040227; RU 2005132631 A 20040227; UA 2005009919 A 20040227; US 39585503 A 20030325; ZA 200507648 A 20050921